

## CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Amended) A stack having a stack depth configured in a nonvolatile memory to store parameter values, where each memory write invalidates previous data.
2. (Original) The stack of claim 1 wherein the nonvolatile memory includes a pair of blocks that are erased independently.
3. (Original) The stack of claim 2 wherein valid parameter values are stored in a first block of the pair of blocks and a second block is erased.
4. (Original) The stack of claim 3 wherein valid parameter values are stored in the second block of the pair of blocks and the first block is erased.
5. (Original) The stack of claim 1 further including a register to store an offset value used to generate an address for words in the nonvolatile memory.
6. (Original) The stack of claim 1 further including a smart stack controller to dynamically determine a number of blocks used in the stack.
7. (Original) The stack of claim 1 further including a smart stack controller to distribute

write cycles across multiple blocks of the nonvolatile memory.

8-10. Cancelled

11. (Previously Amended) A nonvolatile stack to store parameter values in words of a nonvolatile memory where a write of the nonvolatile stack invalidates previous instructions or data stored in the nonvolatile stack.

12. (Previously Amended) The nonvolatile stack of claim 11 wherein a memory pool in at least first and second blocks of the nonvolatile memory are sized to balance cycling and data retention capabilities with a write specification.

13. (Previously Amended) The nonvolatile stack of claim 11 further including a stack controller to distribute write cycles across multiple blocks of the nonvolatile memory.

14. (Previously Amended) The nonvolatile stack of claim 11 wherein the nonvolatile memory maps a received address to determine memory blocks to be written.

15-31. Cancelled

32. (New) The stack of claim 1 wherein the nonvolatile memory is a polymer memory that includes ferroelectric memory cells.